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FACSIMILE TRANSMISSION

March 2, 2007

TO :   U.S. PATENT AND TRADEMARK OFFICE

ATTN: Magdalen Greenlief

FAX NO.:   571-273-0125   TELEPHONE: 571-272-8800

FROM: Richard A. Gollhofer

RE: **U.S. Application No. 10/796,059**

OUR DOCKET: 826.1930

NO. OF PAGES (Including this Cover Sheet) 17

Transmitted herewith are

(1) Form PTO/SB/20 requesting participation in the Patent Prosecution Highway (PPH) Pilot Program between the JPO and the USPTO;
(2) a verified English translation of the Notice of Rejection Grounds mailed July 18, 2006 in the corresponding Japanese patent application; and
(3) a verified English translation of the claims of the corresponding Japanese patent application;
(4) a Preliminary Amendment amending the U.S. claims to conform to the Japanese claims as currently amended.

REQUEST FOR PARTICIPATION IN THE PATENT PROSECUTION HIGHWAY (PPH) PILOT PROGRAM BETWEEN THE JPO AND THE USPTO

Application No.:	10/796,059	First Named Inventor:	Shinji KIKUCHI
Filing Date:	March 10. 2004	Attorney Docket No.:	826.1930
Title of the Invention:	DEVICE FOR DETECTING FAILURE OF COMMUNICATION NETWORK		

THIS REQUEST FOR PARTICIPATION IN THE PPH PILOT PROGRAM MUST BE FAXED TO:
THE OFFICE OF THE COMMISSIONER FOR PATENTS AT 571-273-0125 DIRECTED TO THE ATTENTION OF MAGDALEN GREENLIEF

APPLICANT HEREBY REQUESTS PARTICIPATION IN THE PATENT PROSECUTION HIGHWAY (PPH) PILOT PROGRAM AND PETITIONS TO MAKE THE ABOVE-IDENTIFIED APPLICATION SPECIAL UNDER THE PPH PILOT PROGRAM.

The above-identified application validly claims priority under 35 U.S.C. 119(a) and 37 CFR 1.55 to one or more corresponding JPO application(s).

The JPO application number(s) is/are: 2003-296768

The filing date of the JPO application(s) is/are: August 20, 2003

I. List of Required Documents:

a. A copy of all JPO office actions (excluding "Decision to Grant a Patent"*) in the above-identified JPO application(s).

    X   Is attached.

    ☐   Is available via Dossier Access System. Applicant hereby requests that the USPTO obtain these documents via the Dossier Access System.

*It is not necessary to submit a copy of the "Decision to Grant a Patent" and an English translation thereof.

b. A copy of all claims which were determined to be patentable by the JPO in the above-identified JPO application(s).

    X   Is attached.

    ☐   Is available via Dossier Access System. Applicant hereby requests that the USPTO obtain these documents via the Dossier Access System.

c. English translations of the documents in a. and b. above along with a statement that the English translations are accurate are attached.

Information disclosure statement listing the documents cited in the JPO office actions is attached.

Copies of all documents are attached except for U.S. patents or U.S. patent application publications.

REQUEST FOR PARTICIPATION IN THE PATENT PROSECUTION HIGHWAY (PPH) PILOT PROGRAM BETWEEN THE JPO AND THE USPTO (continued)

Application No.:	10/796,059	First Named Inventor:	Shinji KIKUCHI

II. Claims Correspondence Table:

Claims in US Application	Patentable Claims in JP. Application	Explanation regarding the correspondence
1	1	without using means plus function language in U.S.
2	3	"program" claim in Japan converted to computer readable medium claim in the U.S. with changes to meet current examination procedure
3	4	
4	6	
5	5	
6	6	
7-11		(canceled)
12	1	using means plus function language in U.S.

III. All the claims in the US application sufficiently correspond to the patentable/allowable claims in the JPO application.

IV. Payment of Fees:

The Commissioner is hereby authorized to charge the petition fee under 37 CFR 1.17(h) as required by 37 CFR 1.102(d) to   X   Deposit Account No. 19-3935 _____ .

☐   Credit Card. Credit Card Payment Form (PTO-2038) is attached.

Signature	Richard A. Gollhofer	Date 3/2/07
Name (Print/Typed)	Richard A. Gollhofer	Registration Number 31,106

STATEMENT

I, Fumiko JIBIKI, residing in Tokyo, Japan, hereby certify that I am conversant with the English and Japanese Languages and am a competent translator thereof, and I further certify that to the best of my knowledge and belief the following is an accurate English translation of patent claims in the corresponding Japanese patent application.

Dated: January 26, 2007

Fumiko Jibiki:
Fumiko JIBIKI

(57) [Patent Claims]

[Claim 1]

A failure detecting apparatus for detecting network failures, based on information obtained from a monitor target equipment which is disposed within a communication network and which has a plurality of communication interfaces, comprising:

storage means for storing traffic flow information indicating both an amount of receiving traffic and an amount of transmitting traffic in each interface of the monitor target equipment;

computation means for computing a traffic flow with a virtual point set in the monitor target equipment as a starting or end point among a plurality of segments of traffic inside the monitor target equipment using the traffic flow information, and outputting an obtained flow as an amount of abnormal traffic; and

determination means for determining whether there is a network failure, using the amount of abnormal traffic, thereby outputting a determined result.

[Claim 2]

The failure detecting apparatus according to claim 1, wherein the computation means sets a virtual point indicating a starting and end point of a traffic inside the monitor target equipment, computes a first traffic flow with each interface as a starting point and another interface as an end point inside the monitor target equipment, a second traffic flow with each interface as a starting point and the virtual point as an end point, a third traffic flow with the virtual point as a starting point and each interface as an end point, and a fourth traffic flow with each interface as a starting point and the same interface as an end point inside the monitor target equipment, and computes a sum of the second, third and fourth traffic as the amount of abnormal traffic.

[Claim 3]

A program for a computer to detect network failures, based on information obtained from a monitor target equipment which is disposed within a communication network and which has a plurality of communication interfaces, said program enabling the computer to perform the processes of:

extracting traffic flow information indicating both an amount of receiving traffic and an amount of transmitting traffic in each interface of the monitor target equipment, from storage means of the computer;

computing a traffic flow with a virtual point set in the monitor target equipment as a starting or end point among a plurality of segments of traffic inside the monitor target equipment, using the traffic flow information; and

determining whether there is a network failure, using the amount of abnormal traffic.

[Claim 4]

The program according to claim 3, wherein

said program enables the computer to perform the process of computing at least one of an amount of traffic of data generated by and outputted from the monitor target equipment, an amount of traffic of data discarded by the monitor target equipment and an amount of traffic of data transmitted from the same interface after being received, of an interface of the monitor target equipment, as the amount of abnormal traffic.

[Claim 5]

The program according to claim 3, wherein

said program enables the computer to perform the process of setting a virtual point indicating a start or an end of a traffic inside the monitor target equipment, computing a first traffic flow with each interface as a starting point and another interface as an end point inside the monitor target equipment, a second traffic flow with each interface as a starting point and the virtual point as an end point, a third traffic flow with the virtual point as a starting point and each interface as an end point, and a fourth traffic flow with each interface as a starting point and the same interface as an end point inside the monitor target equipment, and computing a sum of the second, third and fourth traffic as the amount of abnormal traffic.

[Claim 6]

The program according to claim 3 or 5, wherein

said program enables the computer to perform the process of obtaining a proportion of the amount of abnormal traffic to a sum of traffic inside the monitor target equipment, and determining that there is a network failure when the proportion of the amount of abnormal traffic is greater than a prescribed threshold value.

(57)【特許請求の範囲】
【請求項1】
　複数の通信インタフェースを有し通信ネットワーク内に配置された監視対象機器から得られる情報に基づいて、ネットワーク障害を検出する障害検出装置であって、
　前記監視対象機器の各インタフェースにおける受信トラフィック量と送信トラフィック量を表すトラフィック流量情報を格納する格納手段と、
　前記トラフィック流量情報を用いて、前記監視対象機器の内部における複数のトラフィックのうち、該監視対象機器の内部に設けられた仮想点を終点または始点とするトラフィックの流量を計算し、得られた流量を異常トラフィック量として出力する計算手段と、
　前記異常トラフィック量を用いて前記ネットワーク障害が発生したか否かを判定し、判定結果を出力する判定手段と
を備えることを特徴とする障害検出装置。
【請求項2】
　前記計算手段は、前記監視対象機器の内部にトラフィックの終点および始点を表す仮想点を設け、該監視対象機器の内部において各インタフェースを始点とし他のインタフェースを終点とする第1のトラフィックの流量と、各インタフェースを始点とし該仮想点を終点とする第2のトラフィックの流量と、該仮想点を始点とし各インタフェースを終点とする第3のトラフィックの流量と、該監視対象機器の内部において各インタフェースを始点とし同じインタフェースを終点とする第4のトラフィックの流量を計算し、該第2、第3、および第4のトラフィックの流量の総量を前記異常トラフィック量として計算することを特徴とする請求項1記載の障害検出装置。
【請求項3】
　複数の通信インタフェースを有し通信ネットワーク内に配置された監視対象機器から得られる情報に基づいて、ネットワーク障害を検出するコンピュータのためのプログラムであって、
　前記コンピュータの格納手段から、前記監視対象機器の各インタフェースにおける受信トラフィック量と送信トラフィック量を表すトラフィック流量情報を取り出し、
　前記トラフィック流量情報を用いて、前記監視対象機器の内部における複数のトラフィックのうち、該監視対象機器の内部に設けられた仮想点を終点または始点とするトラフィックの流量を計算し、
　得られた流量を異常トラフィック量として用いて前記ネットワーク障害が発生したか否かを判定する
処理を前記コンピュータに実行させることを特徴とするプログラム。
【請求項4】
　前記監視対象機器により生成されて出力されるデータのトラフィック量と、該監視対象機器により廃棄されるデータのトラフィック量と、該監視対象機器のインタフェースにより受信された後に同じインタフェースから送信されるデータのトラフィック量のうち少なくとも1つのトラフィック量を、前記異常トラフィック量として計算する処理を前記コンピュータに実行させることを特徴とする請求項3記載のプログラム。
【請求項5】
　前記監視対象機器の内部にトラフィックの終点および始点を表す仮想点を設け、該監視対象機器の内部において各インタフェースを始点とし他のインタフェースを終点とする第1のトラフィックの流量と、各インタフェースを始点とし該仮想点を終点とする第2のトラフィックの流量と、該仮想点を始点とし各インタフェースを終点とする第3のトラフィックの流量と、該監視対象機器の内部において各インタフェースを始点とし同じインタフェースを終点とする第4のトラフィックの流量を計算し、該第2、第3、および第4のトラフィックの流量の総量を前記異常トラフィック量として計算する処理を前記コンピュータに実行させることを特徴とする請求項3記載のプログラム。
【請求項6】
　前記監視対象機器の内部におけるトラフィックの総量に対する前記異常トラフィック量の比率を求め、該異常トラフィック量の比率が所定の閾値より大きい場合に前記ネットワーク障害が発生したと判定する処理を前記コンピュータに実行させることを特徴とする請求項3または5記載のプログラム。
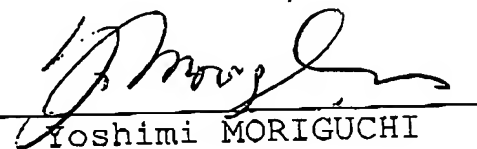
STATEMENT

I, Yoshimi MORIGUCHI, residing in Tokyo, Japan, hereby certify that I am conversant with the English and Japanese Languages and am a competent translator thereof, and I further certify that to the best of my knowledge and belief the following is an accurate English translation of Notice of Rejection Grounds mailed on July 18, 2006.

Dated: January 26, 2007

                                          Yoshimi MORIGUCHI

Patent: 2003-296768   Mailing No: 307587

(Translation of an official notice)

Notice of Rejection Grounds

Patent Application; Filing No.:   2003-296768
Date of drafting notice: Jul. 12, 2006
Patent examiner: Yoichi KIKUCHI   3250 5X00
Applicant's attorney: Yoshiyuki OSUGA and another
Applicable clauses: Section 29(2)

This application is not allowed under below-specified grounds. Applicant may submit an opinion letter within 60 days after the mailing date of this notice if the Applicant wishes to state any opinion relating to this notice.

Ground

The inventions associated with below-identified claims of the present application are deemed to have been easy for an ordinary skilled person in the art to contemplate before the present application has been filed from the inventions having been disclosed in the below-listed publications that have been distributed in Japan or in other countries or the inventions become available for public via electronic communication networks before the present application has been filed. These claims, therefore, are not allowable under provisions set forth in Section 29(2) of the Patent Law.

Detail (see list of referenced documents for detail
of the documents indicated by document numbers)

Claims: 1 – 3
Reference documents: 1 and 2
Remarks:

Documents 1 & 2 describe inventions for detecting presence of a trouble by conducting a calculation for determining an amount concerned with trouble-ridden traffic such as a traffic loss from amounts of input and output data.

1

Patent: 2003-296768   Mailing No: 307587

There is no significant difference between an invention described in document 1 or 2 and an invention recited in any of the above indicated claims.

Claims: 4
Reference documents: 1 and 2
Remarks:

Determining an occurrence rate of traffic related troubles is abnormal when it exceeds a pre-assigned threshold value is considered to represent a design issue that is left for a person in the art to decide what to do to suit to requirements of each implementation case.

We presently do not find any rejection ground with respect to inventions associated with claims other than those indicated above. If any rejection ground is identified in future, it will be advised to Applicant in due course.

List of reference documents

1. Japanese Patent Application, Publication No.H11-261570 gazette
2. Japanese Patent Application, Publication No.H11-127155 gazette

Record of performed prior art document searches

- Search areas: IPC 7ᵗʰ revision

        H04L   12/00 – 12/26
               12/50 – 12/66

This record of performed prior art document searches does not constitute a part of this Notice of Rejection Grounds.

Inquiry relating to this Notice of Rejection Grounds may be directed to:
        Mr. Yoichi KIKUCHI,
        Digital communication, No. 4 Patent Examination Dept.
            Tel: 03-3581-1101 ext. 3594
            Fax: 03-3501-0699

                                    - End -

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［特許］2003-296768 ［発送番号］307587　　　　　　　　　　　　　1

拒絶理由通知書

特許出願の番号	特願2003-296768
起案日	平成18年 7月12日
特許庁審査官	菊地 陽一 　　　　3250 5X00
特許出願人代理人	大菅 義之（外 1名） 様
適用条文	第29条第2項

　　この出願は、次の理由によって拒絶をすべきものである。これについて意見が
あれば、この通知書の発送の日から60日以内に意見書を提出して下さい。

理　　由

　　この出願の下記の請求項に係る発明は、その出願前日本国内又は外国において
頒布された下記の刊行物に記載された発明又は電気通信回線を通じて公衆に利用
可能となった発明に基いて、その出願前にその発明の属する技術の分野における
通常の知識を有する者が容易に発明をすることができたものであるから、特許法
第29条第2項の規定により特許を受けることができない。

記　　　（引用文献等については引用文献等一覧参照）

請求項：1-3
引用文献：1，2
　　引用文献1，2には、入力されるデータの量と、出力されるデータの量に基づ
いて、トラヒック損失などの異常トラヒックを計算して、障害の検出を行う発明
が記載されている。
　　引用文献1，2に記載された発明と、本願の上記請求項に係る発明との間に、
格別の技術的差異は認められない。

請求項：4
引用文献：1，2
　　異常なトラヒックの比率が、ある閾値を越えたときに異常と判断することは、
当業者における設計的事項と認められる。

　　この拒絶理由通知書中で指摘した請求項以外の請求項に係る発明については、
現時点では、拒絶の理由を発見しない。拒絶の理由が新たに発見された場合には
拒絶の理由が通知される。

引 用 文 献 等 一 覧

1．特開平11－261570号公報
2．特開平11－127155号公報

- -

先行技術文献調査結果の記録

・調査した分野　ＩＰＣ第7版
　　ＨＯ４Ｌ　 12／00－12／26
　　　　　　　 12／50－12／66

（

この技術文献調査結果の記録は、拒絶理由を構成するものではない。

この拒絶理由通知の内容に関するお問い合わせ、または面接のご希望がござい
ましたら下記までご連絡下さい。

特許審査第4部　デジタル通信　　菊地　陽一
　　ＴＥＬ．03（3581）1101　内線　3594
　　ＦＡＸ．03（3501）0699

（

部長／代理	審査長／代理	審査官	審査官補
	宮島　郁美	菊地　陽一	
	8523	3250	

Disclaimer:

This English translation is produced by machine translation and may contain errors.The JPO, the INPIT, and and those who drafted this document in the original language are not responsible for the result of the translation.

Notes:

1. Untranslatable words are replaced with asterisks (****).

2. Texts in the figures are not translated and shown as it is.

Translated: 01:04:15 JST 03/06/2007

Dictionary: Last updated 02/09/2007 / Priority:

Decision to Grant a Patent

Application number: Application for patent 2003-296768

Date of Drafting: Heisei 18(2006) October Three days

Patent examiner: KIKUCHI, Yoichi 3250 5X00

Title of invention: Equipment which detects the obstacle of a communication network

The number of claims: 6

Applicant: FUJITSU LIMITED

Representative: OSUGA, Yoshiyuki (and 1 others)

This application is to be granted a patent as there is no reason for refusal.

Director General(p.p.) Director(p.p.) Examiner Assistant examiner Manager for Determination of Classification MIYAJIMA, Ikumi KIKUCHI, Yoichi IBATO, Fumihiko 8523 3250 9199

1. Distinction of Patent: Usually

2. Reference documents: **

3. Application of Patent Law, Section 30: Nothing

4. Change of Title of Invention: Nothing

5. International Patent Classification (IPC)

H04L 12/26 , H04B 17/02 E, H04L 13/00 313

6. Deposition of Microorganism

7. Display of Purport that Retroactivity of Filing Date is not Accepted

Decision to Grant a Patent(Memorandum)

Application number: Application for patent 2003-296768

1. Fields Searched (IPC, DB Name)
H04L 12/26 H04B 17/02 H04L 29/14

2. Reference patent documents
JP,11-261570,A (JP, A) JP,11-127155,A (JP, A)

3. Reference books and magazines

[Translation done.]